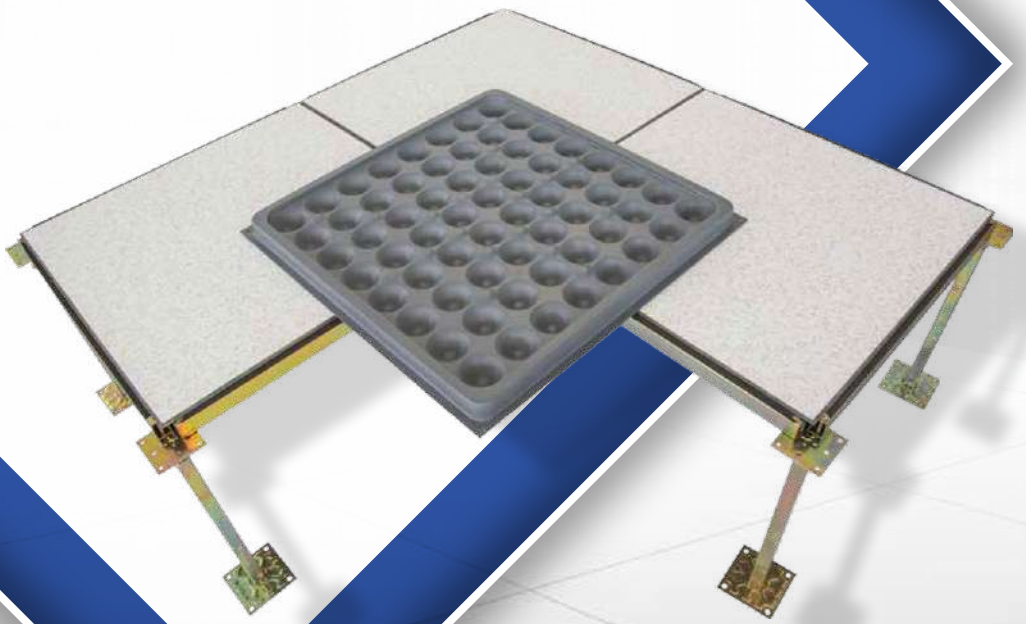
BATES INTERIOR SOLUTIONS (PTY) LTD
Reg No.: 2019/031133/07

Suppliers and installers of Raised Access Flooring & Energy Solutions

Proud resellers and installers of:

BIS/FS/ST SYSTEM

- A dual-function freestanding & snap-on stringer system
- A dual-function bolt-on stringer & screw-down system



BIS/FS/ST SYSTEM

Raised access floor Specification

This specification covers the BIS/FS/ST 660 (General Office Standard), BIS/FS/ST 800 (General Office & Computer Room Standard), the BIS/FS/ST 1000 (Computer Room Standard) and the BIS/FS/ST 1250 (Computer Room Heavy Duty Standard) capable of meeting the requirements of the Load Performance Table below.

The Raised Access Floor System consists of 600mm x 600mm x 35mm modular and interchangeable steel panels, all supported by steel under-structure.

The completed and installed access floor system should be rigid and firm and free of rocking panels and or any movement. The final product once installed correctly must be free of any noise due to movement or other reasons that may contribute negatively to the acoustic properties of the area.

Load Performance

Product Code	Application	Dimensions	Concentrated Load	Impact Load	Ultimate Load	Safety Factor	Uniformly Distributed Load	Rolling Load	
		mm	KG	N	N		NM^2	N	N
BIS/FS/ST System			Deflection 2mm					10 Passes	10000 Passes
BIS/FS/ST 800	General Office & Computer Room Standard	600 x 600 x 35	363	671	≥ 10650	≥ 3 X	≥ 13590	3120	2260
BIS/FS/ST 1000	Computer Room Standard	600 x 600 x 35	453	672	≥ 13320	≥ 3 X	≥ 16750	3550	3120
BIS/FS/ST 1250	Computer Room Heavy Duty Standard	600 x 600 x 35	567	673	≥ 16650	≥ 3 X	≥ 19100	4440	3550
BIS/FS/ST 1500	Extra Heavy Duty class 1	600 x 600 x 35	680	670	≥ 19980	≥ 3 X	≥ 21550	5550	4440

Heavier grades available on request

Test report in accordance with (EN 1204 3.1) done at Sanas accredited SGS laboratories to specifications (BS EN 12825:2001)

The product complies with EN10204 3.1 done at Sanas accredited SGS laboratories to Specification (BS EN 12825:2001) and as per CISCA recommended

Test Procedures for Access Floors 2007.

The raised access floor system must be manufactured under an integrated quality assurance System ISO 9001.

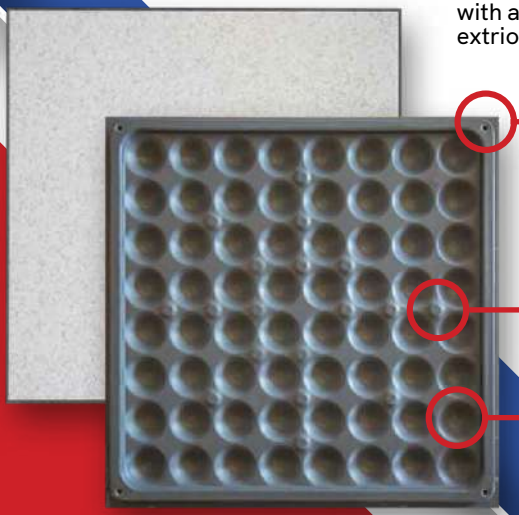
BIS/FS/ST SYSTEM

Component Specification

The BIS/FS/ST access floor panels are structurally rigid linear assemblies fabricated from non-combustable components and consists of high hardness top steel sheet, welded to a deep drawing steel bottom section of domed formation.

The underside of the panel shall consist of a specially designed four corner self-locating and solid locking system. It has a 18 convex salient point structure and an international dome design. All these additional design features result in the higher dimensional precision and panel strength.

The exterior and interior surface of the panel is corrosion protected. The core of the panel is filled with a non-combustible cementious compound. The extrior of the panel is epoxy coated.



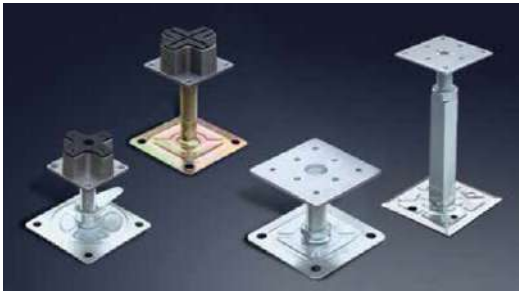
Specially Designed 4 Corner Positive Locking Hole
(for free-standing system)
Flexible and simple for both bare and laminated systems without having to change pedestals. Enables a higher load capacity.

Salient Points Structure
18 Salient points providing better load capacity

International Dome Design
More elegant appearance, higher dimensional precision and panel strength.

BIS/FS/ST SYSTEM

- A dual-function freestanding & snap-on stringer system
- A dual-function bolt-on stringer & screw-down system



BIS/FS/ST SYSTEM

Freestanding System

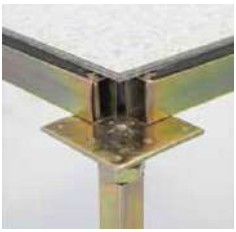
The ST access flooring panels positively locate onto the aluminium head at all four corners. The aluminium head that the panels locate on to has a pvc gasket to reduce noise. The head is supported by a corrosive protected steel bas. This option does not require screws and is fully functional without any screws.

BIS/FS/ST SYSTEM

Snap-on Stringer System

Simply open the panels and clip the steel Snap-On stringer into place on the pedestal head. The stringer comes with a pre-assebled rubber gasket to reduce any noise transfer from the panel into the room. Again, as a result of the Access Floor Panel Positively Locating onto the aluminium head the stringers can also be removed without the access floor system loosing lateral stabiltity.

The same pedestal head can be used for all 3 systems and will positively locate and self-align the pedestal head with the access floor panel.



BIS/FS/ST SYSTEM

Bolt-on Stringer System

The bolt-on system uses a Steel flat head with drilled and tapped holes to accept the bolt-on stringer tube with rubber gasket. This system is commonly used where higher load capacity is required. This understructure is also interchangeable with other panels within **our** Access Flooring product offerings making panels from the Solid Lock System interchangeable as well.

BIS/FS/ST SYSTEM

Screw-down System

The ST system is simply screwed in place by four corrosion resistant fasteners that bolt through the panel and mechanically fix the panel to the pedestal heads.

The panels are then able to be removed by simply releasing the fasteners. All fasteners may be removed without loss of the floor's lateral stability.

BIS/FS/ST SYSTEM

Understructure System

The ST Under-Structure System is generic to the Freestanding System and the Snap-on Stringer System. The understructure is universal to all 3 grades of floors, ranging from standard to heavy duty floors. The system consists of an aluminium die cast, factory assembled head and steel base which is surface treated with a corrosion-resistant finish. This assembly is capable of supporting a minimum load of 22.5kN. The understructure must comply with CISCA Section 5 of 2007 test procedures for Pedestrial Axial load.

Pedestal Axail Load Test

Pedestal	Ultimate Load
1	55.5
2	53.9
3	58.7
Average	56.0

A corrosion resistant lock nut with an anti-rotation & vibration proof feature is provided to allow the pedestal assembly to be adjusted over a range of 50mm (25m up and 25mm down)

Pedestal Overturning Moment Test

These tests are done to determine the overturning moent of the pedestal assembly and must be done accordng to section 6 of CISCA recommended test procedures for access floors 2007.

Pedestal	Horizontal Load at Failure (N)	Overturning Moment (Nm)
1	530	318
2	510	306
3	676	406
4	580	348
5	680	408
Average	595	357

SYSTEM TOLERANCES AND LIMITS

The access floor components and installed access floor system must conform to the requirements of the Tolerances and Limits table below.

Description	Tolerance / Limit
Panel Size	600mm x 600mm +0,00mm - 0,50mm
Panel Squareness	± 0,50mm
Panel Flatness	± 0,50mm
Installed Access Floor Level	1,50mm in 3.00m / 2,50 mm over the entire floor
Variation in height between ajoining panels	0,50mm
Maximum depth of panel and pedestal head assembly	± 40mm
Maximum panel mass	16,5 kg
Maximum system mass	55 kg per m^2

FLAME AND SMOKE SPREAD FIRE TEST

The test describes the results of the ASTM E48-15b test for Surface Burning Characteristics of Building Materials.

The purpose of the test is to determine the surface burning behaviour of building materials. The test is applicable to exposed surfaces provided that the material or materials, by its own structural quality or manner in which it is tested and intended for the use, is capable of supporting itself in position or being supported during the test period.

The purpose of this method ASTM E48 (25 foot tunnel) is to determine the relative burning behaviour of the material by observng the flame spread along the specimen. Flame spread and smoke density developed are reported however there not necassarily a relationship between these two measurements.

The test results show that there was no flame spread and or smoke that developed during the test period, after the burners were shut off no flames were observed. There was no significant change in the appearace and functionality of the product besides some light charring on the burn side.

All components of the access floor system are to be non-combustible when tested in accordace with he above and the completed installation shall comply with the requirements of the National Building Regulations and Building act of 1977 (as amended) where applicable.

Compliance with codes and Laws

The construction of the raised access floor system and the materials and components used therein shall comply with all local codes and laws regarding safety and health.

Openings of Panels

The construction of the raised access floor system and the materials and components used therein shall comply with all local codes and laws regarding safety and health.

Requirements of the Tenderer and the Sub-contractor

1. Evidence that the tenderer has the ability, knowledge and experience to undertake a large installation.
2. A track record confirming the above.
3. 12 Year warranty on all access flooring components.
4. Certificates from approved international Testing Laboratory showing compliance with this specification.
5. A Quality assurance document which includes control and management procedures.
6. A manual detailing installation, care and maintenance procedures.

Requirements of the Main Contractor

- Providing a smooth and clean sub-floor free of any contaminants and irregularities.
- Providing datum points for setting out of the floor grid and for setting of the finished floor level.
- Ensuring that the work of all sub-trades in the plenum is completed and tested to the satisfaction of the contractor before the raised access floor installation commences.
- Providing work areas for installation of the raised access floor which are clean, sealed from the weather, and clear of all other trades for a period ending at least 48 hours from the time of completion of the raised access floor installation.
- Provide vertical hoisting facilities for the vertical loading of the materials onto the site.

For more information, please contact:

BATES INTERIOR SOLUTIONS (PTY) LTD
Reg No.: 2019/031133/07

Suppliers and installers of
Raised Access Flooring & Energy Solutions

011 447 8370 | +27 82 604 5242
admin@batesinteriorsolutions.co.za
www.batesinteriorsolutions.co.za